An Essay
on
Dermatology
Respectfully Submitted
to the
Faculty
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Homoeopathic Medical College
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A thorough knowledge of the Anatomical relations, and the Physiological condition, of every part of the human system, is of the utmost importance to the Physician

Speculative men with remedies of which they have had but a speculative knowledge have too often failed to cure the diseases of particular organs of the body. A correct knowledge of the functions of these organs and of their exact relations and conditions in health, and in

sickness appears therefore to be in=
=dispensably necessary to every one
who wishes to qualify himself
for the administration of medicine

I therefore consider
Dematology of importance.

The skin is the soft
membranous epitheal covering
of the body, and is compond
of two principal layers the epiderma
and the derma.

The epiderma, or cuticle
is a transparent dry membrane
devoid of nerves and blood vessels.
It has properly been considered
as a secretion of minute scales
placed one above another which
are gradually thrown off.

It has been supposed to be formed and reproduced by an excretory action of the true skin

It serves as a dry varnish which prevents the immediate contact of bodies, with the delicate structure beneath and consequently deadens the tactile impression which without its intervention might prove painful

The epidema is divided into two lagers, first the external which is hard and horny in texture, second the internal lager which is soft and pliant

This membrane has been termed the rete mucosum

, or layer of Malpighi, and is remarkable chiefly, as being the seat of the coloring matter of the skin

We have the theory of the epidermic growth deduced from the observations of Schwann as follows "A stratum of plastic lymph is thrown out upon the surface of the derma, This fluid, by virtue of the vital force inherent in itself, and communicated to it by contact with a living tissue, is converted into granules, which are termed cell germs, or cyto-blasts. By endosmosis, these cyto-blasts imbibe serum from the plastic lymph and adjacent

tissues, and the outermost layer or
follicle of the cyto blast becomes
gradually distended by the imbibed
fluid. The cyto-blast has now
become a cell, and the solid
portion of the cyto-blast, which
always remains adherent to some
one point of the internal surface
of the cell-membrane, is the nucleus
of the cell. within this nucleus
one or several nuclei are formed
which are termed nucleoli". By
the process of imbibition, the
cells gradually cover the surface
of the papillary layer of the
derma, and as new cells
are formed the old ones are
thrown off.

The derma, or Cutis vera is the most important layer of the skin both in structure and function.

It is composed of strong membrane of an elastic character, capable of extension in every direction, and is so constituted as to vary in thickness at different points of its depth upon the same surface.

This membrane is chiefly composed of areolo-fibrous tissue, and has entering into its composition, some elastic fibrous tissue together with blood vessels and nerves

The derma is divided into two layers the corium, and the papillary layer. The first lies within the deep stratum of the dermoid tissue, with it is found some contractile fibrous tissue, and from its peculiar contractile properties it has been termed the cutis anserina.

In the corium the areolo-fibrous tissue is collected into fasiculi, which form an areolar network with large areolae, occupied by adipose tissue in the deep strata of the corium, becoming smaller and more closely interwoven

in the superficial strata, and still smaller and finer in texture, as they extend into the papillary layer.

The Papillary layer is soft and pliant, and is of a red or pinkish hue, in proportion to the quantity of blood it contains.

It is delicately organized, and has been said to be highly vascular, owing to the many capillaries, and nerve filaments entering into its composition. It may in fact be said to be almost wholly composed of nerves, and blood vessels alone, as few tissues possess as much life,

The nervous filaments which are so numerously interwoven into this membrane, extend themselves into little elongated conical prominences technically termed papillae. these are the true organs of touch and sensation and are therefore placed in different parts of the body, where these senses are most acute.

Beneath the papillary layer we find the skin follicles and tubuli. we first have the sebaceous follicles which are found in clusters, and secrete a sebaceous, or oily material

which serves to maintain the pliancy of the skin.

Sudoriferous glands are also abundantly distributed over the whole surface of the body, their use has been supposed to be, to seperate the gaseous and aqueous material excreted by the skin, as well as to secrete perspiration.

These glands take from the blood certain matters which they eliminate.

It has been estimated that there are over seven millions, of these glands in the human body, and the amount of fluid eliminated by the

the skin is about eighteen grains per minute

By accurate experiment made by Seguin, it was estimated that the amount of water exhaled by the skin was eleven grains per minute

Absorption is one of the most important functions of the skin. It is carried on by the lacteals, the general lymphatics, and the capillaries of the skin.

We have thus given a cursory view of the skin and its functions, and we have seen what an important organ it is in assisting and maintaining the health of the human body

In tracing this simple, but
complete and beautiful structure,
we see displayed the most striking
proofs of the wisdom and of the
benificence of its great creator.

Edward Ramson